

SECRET

COPY 1 OF 3

EXHIBIT A

CMCC Doc. No. 1131X5.13

Copy / of 4

Page 1 of 2

7 May 1956

STATEMENT OF WORK

The contractor proposes to supply:

1. Engineering services and materials necessary for the design, construction, laboratory test, and operational flight test of a production prototype of electronic System No. 4, designed to meet performance requirements transmitted to this contractor and developed in general accordance with the procedures set forth in the accompanying technical exhibit. The work program includes the following items:
  - A. Development of breadboard circuits of an entire system consisting of:
    - (1) eight (8) sweeping superheterodyne-type receivers covering the range of 150 mcs to 40,000 mcs, inclusive.
    - (2) two (2) antennas for each of the receivers with means to obtain course DF information by alternating periodically the attenuation inserted in the output of each antenna.
    - (3) Demodulation and analysis equipment for each receiver to permit reception of amplitude-modulated, pulse-modulated, and FM signals.
    - (4) tape recording equipment to permit recording of both AM and FM outputs of each receiver and means to record continuously navigation data (supplied externally), timing data, and signal identification data.
    - (5) an indicator-camera unit available as an "on demand" device to provide a video recording capability not provided by the tape recorder.
    - (6) a channel selector to permit interconnection of the indicator-camera unit to an active receiving channel, with provision for lock-out of all active receiver channels except the one connected to the camera unit.

SECRET

~~SECRET~~

EXHIBIT A

CMCC Doc. No. 1131X5.13

Copy    of 4

Page   2   of 2

7 May 1956

- (7) a system-check unit to permit a periodic "in-the-air" check of the functioning of the entire system (approximately once every ten minutes).
- (8) all power supply equipment required by the system.
- (9) establishment of requirements and specifications for special preflight test equipment and Main Base test equipment required for maintenance purposes.
- B. A completely packaged prototype system, including all units described in Items A-1 through A-8, of such mechanical and improved electrical design as to be suitable for environmental testing.
- C. All environmental tests necessary to evaluate suitability of the environmental model referenced in Section B above.
- D. Any electrical or mechanical redesign required as a result of equipment failure to meet environmental tests.
- 2. Informal monthly progress reports summarizing the work completed during the reporting period in sufficient detail to permit evaluation of the project activity. Delivery of reports will be made within 15 days following termination of the reporting period.
- 3. A Final Engineering Report presenting in detail the analytical and experimental work completed, the results of all significant tests and performance evaluations, circuit schematic diagrams for the equipment units developed, and a complete description of operating characteristics. Delivery of the final report will be made within 30 days following completion of the final equipment tests.
- 4. A proposal presenting the estimated costs and delivery schedule for the required number of production systems will be submitted to the contracting agency by 1 August 1956.
- 5. A proposal presenting the estimated costs and delivery schedule for the special test equipment required for System 4 will be submitted to the contracting agency by 1 July 1956, it being understood that test equipment development will be scheduled to make such equipment available concurrently with delivery of the first operational unit of System 4 equipment.

~~SECRET~~